



## Product datasheet

### Anti-Rac1 antibody ab97732

★ ★ ★ ★ ★ [1 Abreviews](#) [9 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-Rac1 antibody
<b>Description</b>	Rabbit polyclonal to Rac1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic non phosphopeptide derived from around amino acids 69-73 of Human Rac1 ( PLSYP ). <div style="text-align: right;">  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	Recombinant Human Rac1 protein ( <a href="#">ab51014</a> ) can be used as a positive control in WB. HeLa cells; A431 cell extracts.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS  Without Mg2+ and Ca2+
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab97732 was affinity purified from rabbit antiserum by affinity chromatography using epitope specific immunogen.

<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

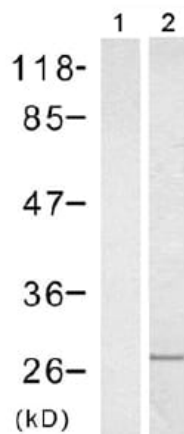
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab97732 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>		1/500 - 1/1000. Predicted molecular weight: 21 kDa.
<b>ICC/IF</b>		1/100 - 1/200.

## Target

<b>Function</b>	Plasma membrane-associated small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, binds to a variety of effector proteins to regulate cellular responses such as secretory processes, phagocytosis of apoptotic cells, epithelial cell polarization and growth-factor induced formation of membrane ruffles. Rac1 p21/rho GDI heterodimer is the active component of the cytosolic factor sigma 1, which is involved in stimulation of the NADPH oxidase activity in macrophages (By similarity). Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. Isoform B has an accelerated GEF-independent GDP/GTP exchange and an impaired GTP hydrolysis, which is restored partially by GTPase-activating proteins. It is able to bind to the GTPase-binding domain of PAK but not full-length PAK in a GTP-dependent manner, suggesting that the insertion does not completely abolish effector interaction.
<b>Tissue specificity</b>	Isoform B is predominantly identified in skin and epithelial tissues from the intestinal tract. Its expression is elevated in colorectal tumors at various stages of neoplastic progression, as compared to their respective adjacent tissues.
<b>Sequence similarities</b>	Belongs to the small GTPase superfamily. Rho family.
<b>Domain</b>	The effector region mediates interaction with DEF6.
<b>Post-translational modifications</b>	AMPylation at Tyr-32 and Thr-35 are mediated by bacterial enzymes in case of infection by H.somnus and V.parahaemolyticus, respectively. AMPylation occurs in the effector region and leads to inactivation of the GTPase activity by preventing the interaction with downstream effectors, thereby inhibiting actin assembly in infected cells. It is unclear whether some human enzyme mediates AMPylation; FICD has such ability in vitro but additional experiments remain to be done to confirm results in vivo.
<b>Cellular localization</b>	Cell membrane. Melanosome. Inner surface of plasma membrane possibly with attachment requiring prenylation of the C-terminal cysteine (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
<b>Form</b>	Rac1 has high sequence homology with other Rac proteins. Therefore some antibodies may show cross-reactivity.

## Images



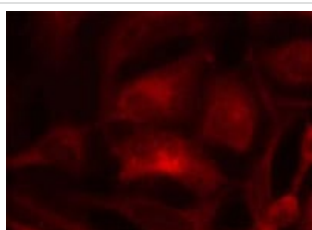
Western blot - Anti-Rac1 antibody (ab97732)

**All lanes** : Anti-Rac1 antibody (ab97732) at 1/500 dilution

**Lane 1** : A431 cell extracts with immunizing peptide

**Lane 2** : A431 cell extracts,

**Predicted band size:** 21 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Rac1 antibody (ab97732)

ab97732 at 1/100 dilution staining Rac1 in methanol-fixed HeLa cells by Immunofluorescence.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors